

**03060103-100**  
*(Savannah River/Lake Thurmond)*

### General Description

Watershed 03060103-100 is located in Abbeville, McCormick, and Edgefield Counties and consists primarily of the **Savannah River** and its tributaries as it flows through **Lake J. Strom Thurmond**.

The watershed occupies 67,584 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cataula-Wilkes-Goldston-Cecil series. The erodibility of the soil (K) averages 0.30, and the slope of the terrain averages 11%, with a range of 2-45%. Land use/land cover in the watershed includes: 65.7% forested land, 26.0% water, 3.8% barren land, 2.9% agricultural land, 0.8% forested wetland, and 0.8% urban land.

The Savannah River flows out of the Richard B. Russell Dam and into Lake Thurmond, where it accepts drainage from Coffey Creek and Russells Creek. The Broad River\* and Pistol Creek\* drain into the lake next from the Georgia side. All tributaries from the Georgia side of the Savannah River will be connoted with an asterisk. Further downstream, Patterson Creek enters the lake followed by Fishing Creek\*, Lees Branch, Harmon Branch, Murray Creek\*, another Patterson Creek, and Soap Creek\*. The Little River watershed enters Lake Thurmond next, followed by Hawe Creek (Jester Branch), Wells Creek\*, Benningsfield Creek, Landam Branch, Shriver Creek\*, and Dordon Creek. At the lower end of the lake, Reese Branch flows into the lake followed by Howell Branch, Little River\*, Lake Spring Creek\*, and Scott Creek. There are a total of 55.1 stream miles and 18,450.6 acres of lake waters within the South Carolina portion of the watershed, all classified FW.

### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
CL-040	W	FW	LAKE THURMOND HEADWATERS (SAVANNAH RIVER)
SV-291	P	FW	LAKE THURMOND AT US 378, 7 MI SW OF MCCORMICK
CL-041	W	FW	LAKE THURMOND IN FOREBAY NEAR DAM

**Lake Thurmond** – There are three stations along Lake Thurmond and **recreational uses** are fully supported **at all sites**. Although a pH excursion occurred at the headwaters site (**CL-040**), due to the small number of samples, aquatic life uses are considered to be fully supported. Aquatic life uses are also fully supported at the midlake site (**SV-291**). There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. In sediments, a high concentration of chromium and very high concentrations of copper and nickel were measured in the 1997 sample. P,P'DDD, a metabolite of DDT, was also detected in the 1997 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Although a pH excursion occurred near the dam (**CL-041**), due to the small sample size, aquatic life uses are considered to be fully supported.

*A fish consumption advisory has been issued by the Department for mercury and includes the Savannah River within this watershed (see advisory p.83).*

## Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-106	GB	PIEDMONT BEDROCK	HAMILTON BRANCH

All water samples collected from ambient monitoring well **AMB-106** met standards for Class GB groundwater.

## NPDES Program

### Active NPDES Facilities

<i>RECEIVING STREAM</i>	<i>NPDES#</i>
<i>FACILITY NAME</i>	<i>TYPE</i>
<i>PERMITTED FLOW @ PIPE (MGD)</i>	<i>COMMENT</i>
LAKE THURMOND	SC0021466
SCPRT/HAMILTON BRANCH	MINOR DOMESTIC
PIPE #: 001 FLOW: M/R	

## Nonpoint Source Management Program

### Land Disposal Activities

#### Landfill Facilities

<i>LANDFILL NAME</i>	<i>PERMIT #</i>
<i>FACILITY TYPE</i>	<i>STATUS</i>
TOWN OF MCCORMICK C/C LANDFILL	CWP-003; 331002-1201
DOMESTIC	INACTIVE
MCCORMICK COUNTY LANDFILL	331002-1701 (SCD987584117)
DOMESTIC	INACTIVE
BARITE HILL/NEVADA GOLD MINE	332338-1601 (IWP-242)
INDUSTRIAL	-----

## Growth Potential

There is a low potential for growth in this watershed, which contains portions of the Towns of Mount Carmel, McCormick, Plum Branch, Parksville, and Modoc. The Town of McCormick has experienced a population growth with the establishment of a State Prison near the town. Growth has occurred around the Savannah Lakes Village Development, a retirement village, on Lake Thurmond, and may encourage more in the future. The majority of the watershed resides within the Sumter National Forest and would tend to limit growth.